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ART 3:110T

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New claims

- 5 1. A process for preparing supported, titanized chromium catalysts, which comprises the following steps:
- 10 A) bringing a support material into contact with a protic medium having a water content less than 20% by weight and comprising a titanium compound and a chromium compound,
- 15 B) optionally removing the solvent,
- C) optionally calcining the precatalyst obtained after step B) and
- D) optionally activating the precatalyst obtained after step B) or C) in an oxygen-containing atmosphere at from 400°C to 1100°C.
- 20 2. A process as claimed in claim 1, wherein the support material is a silica gel.
3. A process as claimed in claim 1 or 2, wherein the chromium compound is an inorganic chromium compound.
- ~~4. A process as claimed in claim 3, wherein the inorganic chromium compound is~~
- 25 ~~chromium(III) nitrate nonahydrate.~~
5. A process as claimed in any of claims 1 to 4, wherein the titanium compound is titanium tetraisopropoxide, titanium tetra-n-butoxide or a mixture of these two titanium compounds.
- 30 6. A process as claimed in any of claims 1 to 5, wherein the protic medium is methanol.
7. A catalyst system obtainable by a process as claimed in any of claims 1 to 6.
- 35 8. A process for preparing polyolefins by polymerization or copolymerization of olefins in the presence of a catalyst system as claimed in claim 7.
9. A process as claimed in claim 8, wherein ethylene or a monomer mixture of ethylene and/or C₃-C₁₂-1-alkenes containing at least 50 mol% of ethylene is used as monomer(s) in the polymerization.
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